Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A system for controlling an electric motor in a motor vehicle, comprising:

at least one controller for receiving and processing a plurality of system input signals;

a first ~~strategy~~ step embodied within the at least one controller for determining a maximum energy amount that can be put into the motor before the temperature of the motor is caused to rise to a maximum allowable temperature;

a second ~~strategy~~ step embodied within the at least one controller for determining a motor power assist value that the motor can provide in a predetermined time period before the motor reaches said maximum allowable temperature;

a third step embodied within said at least one controller for determining a battery power assist value;

a fourth step embodied within said at least one controller for determining a maximum power assist value that is the minimum of said motor power assist value and said battery power assist value;

means for outputting said motor power assist value to a vehicle system controller;

~~a third strategy embodied within said at least one controller for determining a battery power assist value;~~

~~a fourth strategy embodied within said at least one controller for determining a maximum power assist value that is the minimum of said motor power assist value and said battery power assist value;~~ and

a means for outputting said maximum power assist value to said vehicle system controller.

2. (canceled)

3. (currently amended) The system according to claim 1, wherein said system further comprises:

a fifth ~~strategy~~ step embodied within the at least one controller for comparing said maximum power assist value to a driver demand signal; and

means for outputting a minimum of said maximum power assist value and said driver demand signal to said vehicle system controller.

4. (previously presented) The system according to claim 1, wherein said system further comprises means for outputting said maximum power assist value to a power assist gauge.

5. (previously presented) The system according to claim 1, wherein said battery power assist value is based on a battery state of charge signal.

6. (original) The system according to claim 1, wherein said system inputs comprise:

ambient air temperature;

motor temperature; and

motor speed.

7. (original) The system according to claim 6, wherein said motor temperature comprises a stator copper temperature.

8. (original) The system according to claim 1, wherein said predetermined time period is about 10 seconds.

9. (original) The system according to claim 1, wherein said predetermined time period is based on vehicle operating conditions.

10. (currently amended) The system according to claim 1, wherein said first ~~strategy~~ step comprises ~~a strategy for~~ calculating the temperature of a plurality of motor components as a function of time using heat transfer determinations.

11. (original) The system according to claim 10, wherein said plurality of motor components comprises:

motor stator copper; and

motor stator iron.

12. (currently amended) The system according to claim 1, wherein said second ~~strategy~~ step uses a look up table to determine said motor power assist value.

13. (original) The system according to claim 12, wherein said look up table contains data referencing at least one of said plurality of system input signals and said maximum energy amount.

14. (previously presented) A method for controlling an electric motor in an hybrid electric vehicle, comprising the steps of:

monitoring and processing a plurality of system input signals;

determining a maximum energy amount that can be put into the motor before the temperature of the motor rises to a maximum allowable temperature;

determining a motor power assist value that the motor can provide in a predetermined period of time before the motor temperature rises to said maximum allowable temperature;

determining a battery power assist value;

determining a maximum power assist value that is the minimum of said motor power assist value and said battery power assist value; and

outputting said motor power assist value to a vehicle system controller.

15. (canceled)

16. (canceled)

17. (previously presented) The method according to claim 14, wherein said step of determining a battery power assist value comprises the step of deriving said battery power assist value from a battery state of charge signal.

18. (previously presented) The method according to claim 14, further comprising the step of outputting said maximum power assist value to the vehicle system controller.

19. (previously presented) The method according to claim 14, further comprising the step of outputting said maximum power assist value to a power assist gauge.

20. (previously presented) The method according to claim 14, further comprising the steps of:

comparing said maximum power assist value to a driver demand signal; and

outputting a minimum of said maximum power assist value and said driver demand signal to the vehicle system controller.

21. (original) The method according to claim 14, wherein said step of monitoring and processing a plurality of system inputs comprises the steps of:

monitoring and processing a signal for ambient air temperature;

monitoring and processing at least one signal for motor temperature; and

monitoring and processing a signal for motor speed.

22. (original) The method according to claim 21, wherein said step of monitoring and processing at least one signal for motor temperature comprises the step of monitoring and processing a signal for motor stator copper temperature.

23. (original) The method according to claim 14, wherein said step of determining a maximum energy amount that can be put into the motor before the motor reaches a maximum allowable temperature comprises the step of calculating the temperature of a plurality of motor components as a function of time using heat transfer determinations.

24. (original) The method according to claim 23, wherein said plurality of motor components comprises:

motor stator copper; and

motor stator iron.

25. (original) The method according to claim 14, wherein said step of determining a motor power assist value that the motor can provide in a predetermined period of time before the motor temperature reaches said maximum allowable temperature comprises the step of determining said motor power assist value using a look up table.

26. (original) The method according to claim 25, wherein said look up table contains data referencing said at least one of said plurality of system input signals and said maximum energy amount.

27. (original) The method according to claim 14, wherein said predetermined time period is about 10 seconds.

28. (original) The method according to claim 14, wherein said predetermined time period is based on vehicle operating conditions.

29. (currently amended) An article of manufacture, comprising:

a computer readable storage device; and

a plurality of ~~strategies~~ steps in computer readable format embodied in said computer readable storage device for directing a computer to control ~~the steps of~~ monitoring and processing a plurality of system input signals, said ~~strategies~~ steps comprising

a determination of a maximum energy amount that can be put into an electric motor before the temperature of the motor rises to a maximum allowable temperature,

a determination of a motor power assist value that the motor can provide in a predetermined period of time before the motor reaches said maximum allowable temperature, determining a battery power assist value,

a determination of a maximum power assist value that is the minimum of said motor power assist value and said battery power assist value, comparing said maximum power assist value to a driver demand signal, and

an output of a minimum of said maximum power assist value and said driver demand signal to a vehicle system controller.

30. (currently amended) A vehicle, comprising:

a computer readable storage device; and

a plurality of ~~strategies~~ steps in computer readable format embodied in said computer readable storage device for directing a computer to control ~~the steps of~~ monitoring and processing a plurality of system input signals said ~~strategies~~ steps comprising:

a determination of a maximum energy amount that can be put into an electric motor before the temperature of the motor rises to a maximum allowable temperature,

a determination of a motor power assist value the motor can provide in a predetermined period of time before the motor temperature reaches said maximum allowable temperature, determining a battery power assist value,

a determination of a maximum power assist value that is the minimum of said motor power assist value and said battery power assist value, comparing said maximum power assist value to a driver demand signal, and

an output of a minimum of said maximum power assist value and said driver demand signal to a vehicle system controller.

31. (previously presented) A method for controlling an electric motor in an hybrid electric vehicle, comprising the steps of:

determining a maximum allowable temperature for the motor;

determining a motor power assist value that the motor can provide in a predetermined period of time before the motor temperature rises to said maximum allowable temperature;

determining a battery power assist value; and

controlling the motor to a maximum power assist value that is the minimum of said motor power assist value and said battery power assist value.

32. (previously presented) The method according to claim 31, wherein said step of determining a battery power assist value comprises the step of deriving said battery power assist value from a battery state of charge signal.

33. (previously presented) The method according to claim 31, further comprising the step of outputting said maximum power assist value to at least one of a vehicle system controller and a power assist gauge.

34. (previously presented) The method according to claim 33, further comprising the steps of:

comparing said maximum power assist value to a driver demand signal; and

outputting a minimum of said maximum power assist value and said driver demand signal to the vehicle system controller.

35. (previously presented) The method according to claim 31, wherein said step of determining the motor power assist value comprises the step of calculating the temperature of a plurality of motor components as a function of time using heat transfer determinations.

36. (previously presented) The method according to claim 31, wherein said step of determining the motor power assist value comprises determining said motor power assist value using a look up table that contains data referencing at least one of said plurality of system input signals and a maximum energy amount that can be transferred to the motor before the motor reaches said maximum allowable temperature.

37. (previously presented) The method according to claim 31, wherein said predetermined period of time is based on vehicle operating conditions.